

# **TEST REPORT**

# No. I18D00226-SAR01

### For

**Client: Advanced Mobile Payment Inc.** 

**Production: AMP 6500** 

**Brand Name: AMP POS** 

Model Name: AMP 6500

FCC ID: 2AKJB-AMP6500-1

Hardware Version: AMP 6500-CD

Software Version: V1.0.11

Issued date: 2019-01-09



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# NOTE

- 1. The test results in this test report relate only to the devices specified in this report.
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- For the test results, the uncertainty of measurement is not taken into account when judging the compliance with specification, and the results of measurement or the average value of measurement results are taken as the criterion of the compliance with specification directly.

#### **Test Laboratory:**

East China Institute of Telecommunications

Add: 7-8F, G Area, No.668, Beijing East Road, Huangpu District, Shanghai, P. R. China

Tel: +86 21 63843300 FAX: +86 21 63843301

E-Mail: welcome@ecit.org.cn



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### **Revision Version**

Report Number	Revision	Date	Memo
I18D00226-SAR01	00	2019-02-18	Initial creation of test report

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# 1. Test Laboratory

### 1.1. Testing Location

Company Name:	ECIT Shanghai, East China Institute of Telecommunications
Address:	7-8F, G Area,No. 668, Beijing East Road, Huangpu District,
	Shanghai, P. R. China
Postal Code:	200001
Telephone:	(+86)-021-63843300
Fax:	(+86)-021-63843301
FCC Registration NO.:	489729

### 1.2. Project Data

Project Leader:	Yu Anlu

## 1.3. Signature

Yan Hang

(Prepared this test report)

Fu Erliang

博二良

(Reviewed this test report)

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Zheng Zhongbin (Approved this test report)



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### 2. Client Information

### 2.1. Applicant Information

Company Name: Advanced Mobile Payment Inc.

Address /Post: Units 401-403, 15 Wertheim Court. Richmond Hill, Ontario L

4B 3H7 CANADA

Telephone: 1 (905) 597 2333

### 2.2. Manufacturer Information

Company Name: NEW POS TECHNOLOGY LIMITED

Address /Post: Floor, Block A, Financial Technology Building, No.11 Keyuan Rd,

Nanshan District, Shenzhen

Telephone: /

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# 3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

### 3.1. About EUT

The state of the s	
EUT Description	AMP 6500
Model name	AMP 6500
GSM Frequency Band	GSM1900
WCDMA Frequency Band	Band 2
LTE Frequency Band	Band 2/4/5/7/25/26
Wifi Frequency Band	802.11 a/b/g/n
BT Frequency Band	BT/BLE
Antenna Type	External Antenna

### 3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	SN or IMEI HW Version	
N01	N/A	AMP 6500-CD	V1.0.11

<sup>\*</sup>EUT ID: is used to identify the test sample in the lab internally.

### 3.3. Internal Identification of AE used during the test

AE ID*	II I DESCRIDION I MONEI I		SN	Manufacturer	
-					

<sup>\*</sup>AE ID: is used to identify the test sample in the lab internally.



### 4. Reference Documents For FCC

### 4.1. Applicable Standards

The MPE report was carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Part 2.1091.

FCC CFR 47, Part 2, FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

Section 1.1310 Radiofrequency radiation exposure limits

#### 4.2. Test Limits

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2m normally can be maintained between the user and the device.

Limits for Occupational / Controlled Exposure

Frequency	Electric	Field	Magnetic	Field	Power	Density	Averaging	
Range	Strength	(E)	Strength	Strength (H)			Times  E 2,  H 2	
[MHz]	[V/m]		[A/m]		[mW/cm2]		or S [miniutes]	
0.3 - 3.0	614		1.63		(100)*		6	
3.0 – 30	1824/f		4.89/f		(900/f)*		6	
30 – 300	61.4		0.163		1.0		6	
300 – 1500					F/300		6	
1500 - 100000					5		6	

Limits for General Population / Uncontrolled Exposure

Frequency	Electric	Field	Magnetic	Field	Power	Density	Averaging	
'						Deficity	0 0	
Range	Strength	(E)	Strength	(H)	(S)		Times  E 2,  H 2	
[MHz]	[V/m]		[A/m]		[mW/cm2]		or S [miniutes]	
0.3 – 1.34	614		1.63		(100)*		30	
1.34 – 30	824/f		2.19/f		(180/f)*		30	
30 – 300	27.5		0.073		0.2		30	
300 – 1500					F/1500		30	
1500 - 100000					1.0		30	

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Note: f=frequency in MHz; \*Plane-wave equivalent power density

For the DUT, the limits for General Population / Uncontrolled Exposure are applicable.



### 5. Test Results

## 5.1. RF Power Output

Frequency range	Max power(dBm)	Highest Frame-Averaged Output Power (dBm)	Antenna Gain (dBi)
GSM1900	31	21.97	-2
WCDMA Band2	24	24	-2.4
LTE Band 2	24	24	-2.4
LTE Band 4	24	24	-2
LTE Band 5	24	24	-1.9
LTE Band 7	24.5	24.5	-2.1
LTE Band 25	24	24	-2.0
LTE Band 26	24	24	-2.8
WiFi 802.11b	21	21	-0.5
WiFi 802.11g	20	20	-0.5
WiFi 802.11n20	20	20	-0.5
WiFi 802.11n40	18	18	-0.5
UNII-1	14	14	0
UNII-3	16	16	0
Bluetooth	9	9	-0.5

#### 5.2. Calculation Information

For conservative evaluation consideration, only maximum power of each frequency band based on the tighter limits respectively are used to calculate the boundary power density.

Based on the FCC KDB 447498 D01 and 47 CFR §2.1091, the DUT is evaluated as a mobile device.

Given 
$$S = \frac{P \times G}{4\Pi d^2}$$

Equation 1

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Where

P = Power in Watts

G = Numeric antenna gain



d = Distance in meters

S = Power density in milliwatts / square centimeter

### 5.3. Power density calculations

Band	Highest Output Power (dBm)	Antenna Gain (dBi)	Numeric antenna gain	Power density at 20cm	Limit mW/cm <sup>2</sup>
GSM1900	21.97	-2	0.631	0.020	1.0
WCDMA Band2	24	-2.4	0.575	0.029	1.0
LTE Band 2	24	-2.4	0.575	0.029	1.0
LTE Band 4	24	-2	0.631	0.032	1.0
LTE Band 5	24	-1.9	0.646	0.032	0.567
LTE Band 7	24.5	-2.1	0.617	0.035	1.0
LTE Band 25	24	-2.0	0.631	0.032	1.0
LTE Band 26	24	-2.8	0.525	0.026	0.567
WiFi 802.11b	21	-0.5	0.891	0.022	1.0
WiFi 802.11g	20	-0.5	0.891	0.018	1.0
WiFi 802.11n20	20	-0.5	0.891	0.018	1.0
WiFi 802.11n40	18	-0.5	0.891	0.011	1.0
UNII-1	14	0	1.000	0.005	1.0
UNII-3	16	0	1.000	0.008	1.0
Bluetooth	9	-0.5	0.891	0.001	1.0

Note: For conservativeness, the lowest uplink frequency of each band is used to determine the MPE limit of that band

### 5.4. Calculations

The product is under the MPE limits. All is pass.

\*\*\*\*\*\*\*END OF REPORT\*\*\*\*\*\*\*

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